



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
COOKEVILLE ENVIRONMENTAL FIELD OFFICE
DIVISION OF WATER RESOURCES
1221 SOUTH WILLOW AVENUE
COOKEVILLE, TN 38506
STATEWIDE 1-888-891-8332

PHONE 931-432-4015

FAX 931-432-6952

The Honorable Donny Dennis
P.O. Box 259
Carthage, TN 37030

November 4, 2015

RE: Compliance Evaluation Inspection (CEI), City of Carthage Wastewater Treatment Plant; NPDES TN0022993, Permit Application in Process

Dear Mayor Dennis:

Division of Water Resources staff wishes to thank you, Mr. Ricky Brown and Mr. Steve Key for your generous time and courtesy during the recent Compliance Evaluation Inspection (CEI) at the City of Carthage Wastewater Treatment Facility in Smith County.

Permit

The current NPDES permit became effective on February 27, 2009 and the current NPDES renewal application is in process. The effluent permit limits are maintained in the Carthage laboratory. The complete NPDES permit was on file. The single outfall is at the river bank (U.S. Corps of Engineer's property) of the Cumberland River (Old Hickory Reservoir). The NPDES sign was in place.

Records and Reports

The facility's Monthly Operational Reports (MORs) are electronically mailed and conventionally mailed to the Cookeville Environmental Field Office. The original MOR(s) are stored at the facility. The reports are received in a timely fashion. Operators have worked with the Tennessee Association of Utility Districts (TAUD) to develop their electronic e-MOR.

Facility Site Review

The facility was clean. The tanks within the facility appeared to be in good condition. The automated samplers were operational. The automated effluent sampler was relatively new. Bio-solids were being hauled during the inspection.

Effluent and Receiving Waters

The receiving waters were found to be in good condition. The effluent was observed and photographed. It was clear. The “V” notch weir at the effluent is difficult to reach with regard to checking effluent flow calibration. The chlorine contact chamber is maintained at half capacity in order to improve the tank cleaning process.

Flow Measurement

The influent flow meter is measuring both the City of South Carthage Flow and the City of Carthage flow. The head-works (where both influent flows mix) should be reviewed by the City’s Contract Engineer. The head-works design at the nearby Alexandria STP requires very little maintenance. Operators at the Carthage STP should review the Alexandria STP system in order to observe and note the operation.

Laboratory

Work in the laboratory is in good order with regard to implementing QA/QC procedures. Operators should continue to experiment with additional QA/QC tests for the various analyses and continue to maintain the written laboratory records. It is recommended that the City continue to provide laboratory training for the Operators. It is recommended that the City consider purchasing or budgeting for a Luminescent Dissolved Oxygen (LDO) meter to be used in the Carthage STP laboratory.

Operations and Maintenance

The facility is well maintained. Recent upgrades to the aeration process have been completed. The color in the activated sludge and the odor were found to be in good order. Aeration blowers are being maintained. Flow proportional samplers were operational. Currently the “Radio Station” pump station is being replaced (upgraded) by a new adjacent pump station with submersible pumps. This will improve safety concerns as the old lift station required an elevator entry into the confined space (underground).

Recommendations

- ✓ Maintain the ongoing maintenance activities at the wastewater plant and collection system including head-works improvements.
- ✓ Consider budgeting for a Luminescent Dissolved Oxygen (LDO) meter.
- ✓ Please continue to provide Operators with the knowledge of changing issues through the attendance of courses at the Fleming Training Center.

The Honorable Donny Dennis
Mayor City of Carthage
11/4/15
Page 3

The Division of Water Resources would again like to thank you, Mr. Ricky Brown, and Mr. Steve Key for your time and courtesy during this inspection.

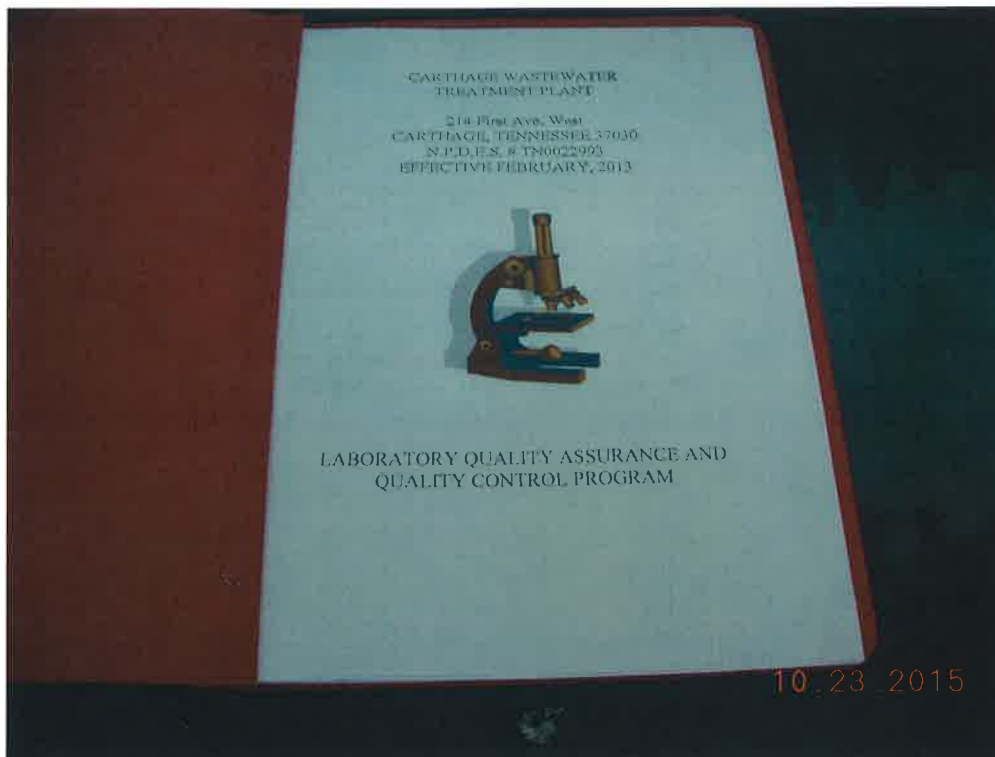
If you have any questions, you may contact Oakley Hall in Cookeville by way of telephone at (931) 432-7635 or toll free at 1-(888)-891-8332. You may also use electronic mail at: Oakley.Hall@tn.gov.

Sincerely,

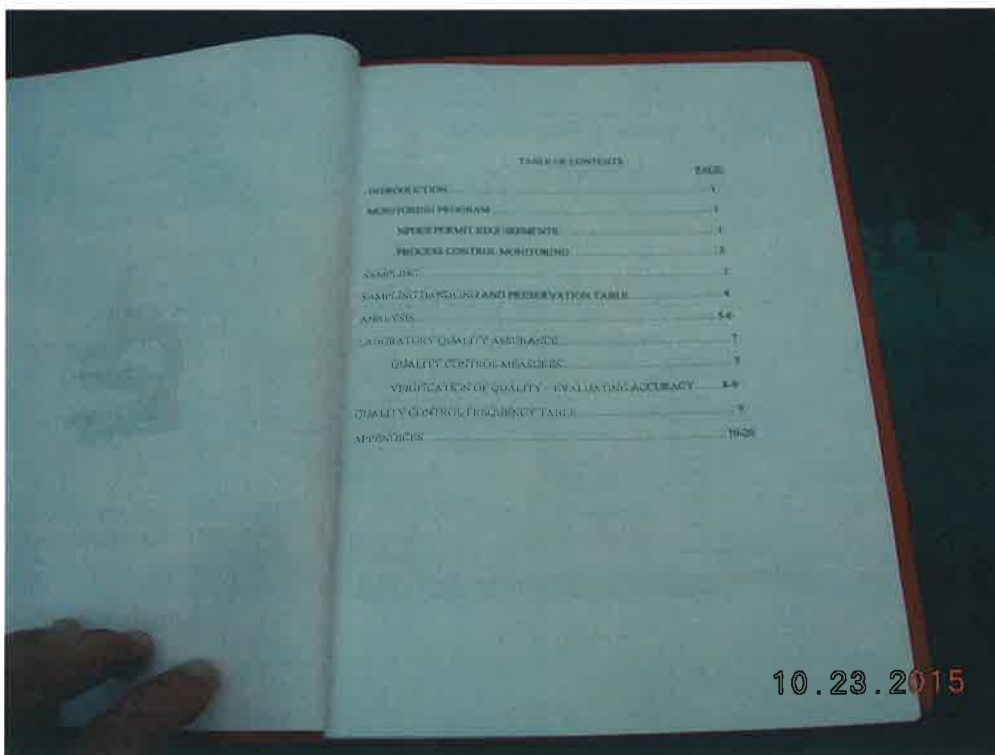
A handwritten signature in blue ink, appearing to read "Johnny K. Walker", with a long horizontal flourish extending to the right.

Johnny K. Walker
Environmental Program Manager III
Division of Water Resources
Cookeville Environmental Field Office
Enclosure: Site Photographs; Water Compliance Inspection Report;
cc: EFO-CK, Smith County DWR Files: TN0022993

Carthage CEI, Photos Recorded By: Wm. Oakley Hall on 10-23-2015



The Laboratory Quality Assurance Program manual is pictured.



The program is on track. Personnel changes are currently taking place and certifications are in process.



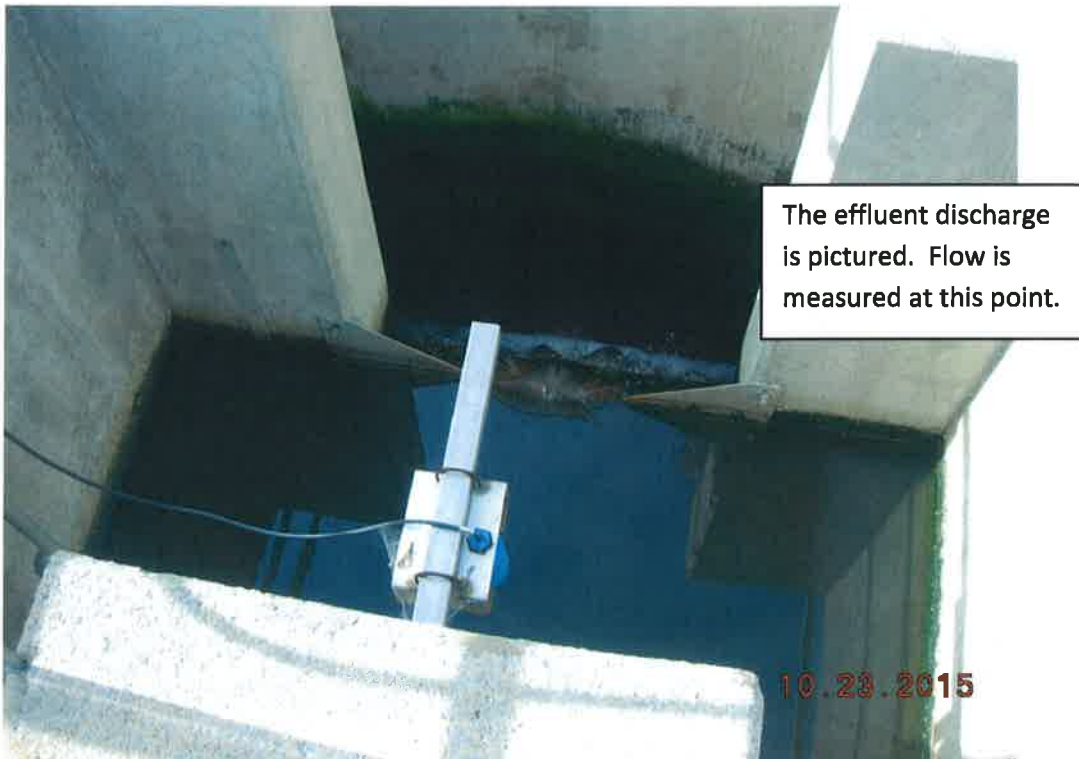
D.O. Meter was operational. A new L.D.O. meter was discussed.



On top of the effluent flow composite sampler are spare parts for the new air diffusers.

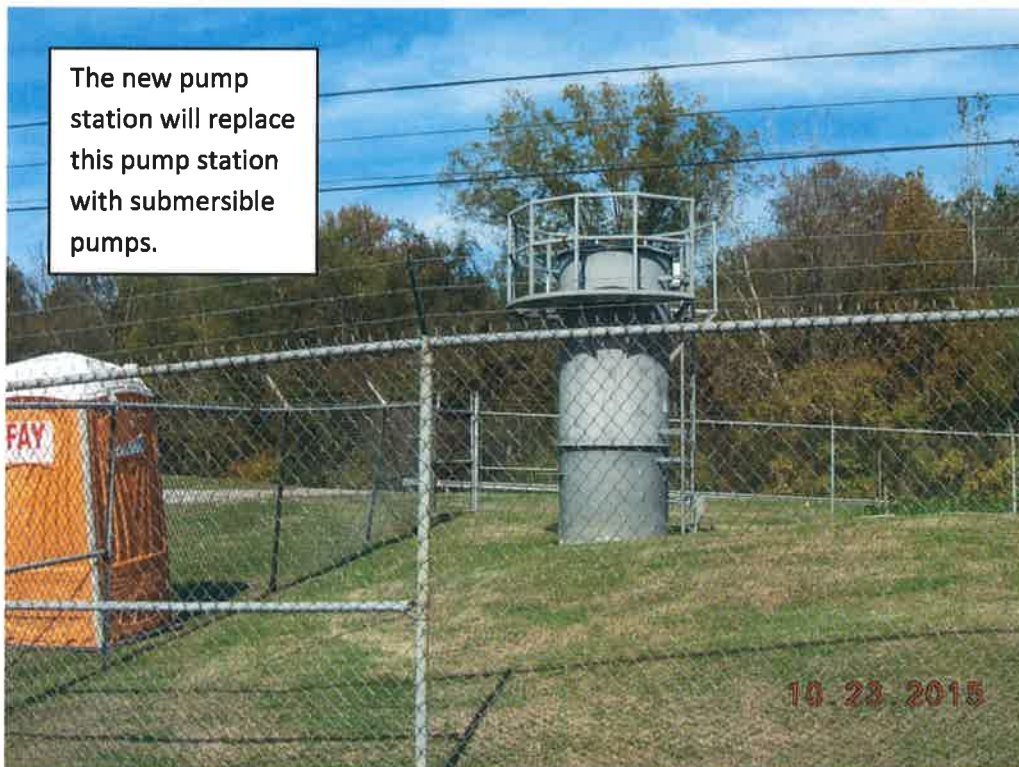


Carthage Influent Head-Works is pictured. It is recommended that the City personnel review the grit/debris removal system at the Alexandria STP.





Construction of the new pump station will be in this location. It will replace the adjacent "Radio Station" pump station which is pictured below. It has an elevator system and is a confined space.





TDEC - Division of Water Resources
Cookeville Field office

ICIS NPDES Facilities Inspection Report

Facility Data

NPDES ID:	TN0022993	Facility Site Name	City of Carthage Sewer Treatment Plant		
		Address	214 First Avenue West, Carthage Tennessee		
Permit Eff. Date:	Feb 27, 2009	Permit Exp Date:	Feb 27, 2014	SIC Code:	

Compliance Monitoring Information

Compliance Monitoring Activity Name	Compliance Evaluation (non-sampling) (CEI)				
	* If Bio Monitoring is selected above, select the method used:				
Compliance Monitoring Activity	Evaluation				

Compliance Monitoring Dates/Times

Entry Date/Time (mm/dd/yyyy hh:mm):	10/23/2015, 09:00 CST	Exit Date/Time (mm/dd/yyyy hh:mm):	10/23/2015, 14:30 CST
-------------------------------------	-----------------------	------------------------------------	-----------------------

Facility Representatives

Mr. Ricky Brown, Chief Operator, 615.735.1404	Mayor Donny Dennis, 615.735.1881
On-Site Representative(s) Title, Phone Number	Responsible Official(s), Title, Phone Number

Statute and Section Information

Federal Statute:	CWA - Clean Water Act	State Statute:	Tennessee Water Quality Control Act
Programs:	NPDES- Base Program (Limits, Reporting, & Schedule)		

Compliance Monitoring Reason: Core Program

Compliance Monitoring Agency Type:	State	Agency Name:	TDEC - DWR
------------------------------------	-------	--------------	------------

Did EPA assist/ Inspection?	No	Time Physically conducting activity: Days:	3	Hours:	0
-----------------------------	----	--	---	--------	---

Inspection Type:	State	Compliance Monitoring Action Outcome:	No Violation
------------------	-------	---------------------------------------	--------------

Lead Agency:	State	Compliance Monitoring Rating Code:	Unsatisfactory
--------------	-------	------------------------------------	----------------

If Joint Inspection, what was the purpose of the other party?	N/A
---	-----

Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Self - Compliance Program	<input type="checkbox"/> Pretreatment
<input checked="" type="checkbox"/> Records / Records	<input type="checkbox"/> Compliance Schedule	<input type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input checked="" type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water
<input checked="" type="checkbox"/> Effluent / Receiving Waters	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow
<input type="checkbox"/> Flow Measurement	<input type="checkbox"/> Sludge Handling / Disposal	<input checked="" type="checkbox"/> Sanitary Sewer Overflow

Compliance Monitoring Summary

The Draft Permit is in the public comment phase. The facility is in good order. recent maintenance activities have been completed. Aeration diffusers are in place. Laboratory QA/QC is on track. A new influent sampler was in place. Mr. Ricky Brown is the Chief Operator.

EPA and State Representatives

Wm. Oakley Hall	TDEC/ DWR Cookeville EFO, 931.432.7635	Nov 4, 2015
Inspector's Signature	Agency / Office / Phone	Date
Johnny K. Walker	TDEC/ DWR Cookeville EFO, 931.432.4015	Nov 4, 2015
Manager's Signature	Agency / Office / Phone	Date

(Note: This form can only be printed to an XPS document, then saved for later use.)